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DATE MAILED: 06/30/2008

NOTICE OF ALLOWANCE AND FEE(S) DUE

7590 06/30/2008

ALSTON & BIRD LLP BANK OF AMERICA PLAZA 101 SOUTH TRYON STREET, SUITE 4000 CHARLOTTE, NC 28280-4000

826

EXAMINER			
LULIS, MICHAEL P			
ART UNIT	PAPER NUMBER		
2824	•		

 APPELICATION NO.
 FILING DATE
 FIRST NAMED INVENTOR
 ATTORNEY DOCKET NO.
 CONFRMATION NO.

 10/552.855
 08/01/2006
 Stephane Auvray
 0.33339/300610
 2527

TITLE OF INVENTION: PROCESS FOR MODIFYING AT LEAST ONE ELECTRICAL PROPERTY OF A NANOTUBE OR A NANOWIRE AND A TRANSISTOR INCORPORATING IT

APPLN. TYPE	SMALL ENTITY	ISSUE FEE DUE	PUBLICATION FEE DUE	PREV. PAID ISSUE FEE	TOTAL FEE(8) DUE	DATE DUE
nonprovisional	NO	\$1440	\$300	\$0	\$1740	09/30/2008

THE APPLICATION IDENTIFIED ABOVE HAS BEEN EXAMINED AND IS ALLOWED FOR ISSUANCE AS A PATENT. PROSECUTION ON THE MERITS IS CLOSED. THIS NOTICE OF ALLOWANCE IS NOT A GRANT OF PATENT RIGHTS. THIS APPLICATION IS SUBJECT TO WITHDRAWAL FROM ISSUE AT THE INITIATIVE OF THE OFFICE OR UPON PETITION BY THE APPLICANT. SEE 37 CFR 1.313 AND MPEP 1308.

THE ISSUE FEE AND PUBLICATION FEE (IF REQUIRED) MUST BE PAID WITHIN THREE MONTHS FROM THE MAILING DATE OF THIS NOTICE OR THIS APPLICATION SHALL BE REGARDED AS ABANDONED. THIS STATUTORY PERIOD CANNOT BE EXTENDED. SEE 35 U.S.C. 1SI. THE ISSUE FEE DUE INDICATED ABOVE DOES NOT REFLECT A CREDIT FOR ANY PREVIOUSLY PAID ISSUE FEE IN THIS APPLICATION. IF AN ISSUE FEE HAS PREVIOUSLY BEEN PAID IN THIS APPLICATION (AS SHOWN ABOVE), THE RETURN OF PART B OF THIS FORM WILL BE CONSIDERED A REQUEST TO REAPPLY THE PREVIOUSLY PAID ISSUE FEE TOWARD THE ISSUE FEE NOW DUE.

HOW TO REPLY TO THIS NOTICE:

I. Review the SMALL ENTITY status shown above.

If the SMALL ENTITY is shown as YES, verify your current SMALL ENTITY status:

A. If the status is the same, pay the TOTAL FEE(S) DUE shown above

B. If the status above is to be removed, check box 5b on Part B - Fee(s) Transmittal and pay the PUBLICATION FEE (if required) and twice the amount of the ISSUE FEE shown above, or

If the SMALL ENTITY is shown as NO:

A. Pay TOTAL FEE(S) DUE shown above, or

B. If applicant claimed SMALL ENTITY status before, or is now claiming SMALL ENTITY status, check box 5a on Part B - Fee(s) Transmittal and pay the PUBLICATION FEE (if required) and 1/2 the ISSUE FFE shown above.

II. PART B - FEE(S) TRANSMITTAL, or its equivalent, must be completed and returned to the United States Patent and Trademark Office (USPTO) with your ISSUE FEE and PUBLICATION FEE (if required). If you are charging the fee(s) to your deposit account, section "4b" of Part B - Fee(s) Transmittal should be completed and an extra copy of the form should be submitted. If an equivalent of Part B is filed, a request to reapply a previously paid issue fee must be clearly made, and delays in processing may occur due to the difficulty in recognizing the paper as an equivalent of Part B.

III. All communications regarding this application must give the application number. Please direct all communications prior to issuance to Mail Stop ISSUE FEE unless advised to the contrary.

IMPORTANT REMINDER: Utility patents issuing on applications filed on or after Dec. 12, 1980 may require payment of maintenance fees. It is patentee's responsibility to ensure timely payment of maintenance fees when due.

PART B - FEE(S) TRANSMITTAL

Complete and send this form, together with applicable fee(s), to: Mail Mail Stop ISSUE FEE Commissioner for Patents P.O. Box 1450 Alexandria, Virginia 22313-1450

or Fax (571)-273-2885

INSTRUCTIONS: This appropriate. All further indicated unless correcte maintenance fee notificat	form should be used to correspondence including d below or directed other ions.	for transmitting the IS ing the Patent, advance herwise in Block 1, by	SUE FEE and PUBLICAT: orders and notification of r (a) specifying a new corres	ON FEE (if require naintenance fees wil spondence address; a	ed). Blocks 1 through 5 : I be mailed to the current and/or (b) indicating a sep	should be completed where t correspondence address as arate "FEE ADDRESS" for	
CURRENT CORRESPONDENCE ADDRESS (Note: Use Block 1 for any change of address)			Fee pap	Note: A certificate of mailing can only be used for domestic mailings of the Fee(s) Transmittal. This certificate cannot be used for any other accompanying papers. Each additional paper, such as an assignment or formal drawing, must have its own certificate of mailing or transmission.			
	RICA PLAZA YON STREET, SU		I be	Certify	ficate of Mailing or Trans Fee(s) Transmittal is bein	smission g deposited with the United st class mail in an envelope above, or being facsimile fate indicated below.	
CHARLOTTE, 1	NC 28280-4000					(Depositor's name)	
						(Signature)	
			L			(Date)	
APPLICATION NO.	FILING DATE		FIRST NAMED INVENTOR	1	ATTORNEY DOCKET NO.	CONFIRMATION NO.	
10/552,855	08/01/2006		Stephane Auvray	•	033339/300610	2527	
TITLE OF INVENTION TRANSISTOR INCORP		DIFYING AT LEAST	ONE ELECTRICAL PROP	ERTY OF A NANO	TUBE OR A NANOWIR	E AND A	
APPLN. TYPE	SMALL ENTITY	ISSUE FEE DUE	PUBLICATION FEE DUE	PREV. PAID ISSUE	FEE TOTAL FEE(S) DUE	DATE DUE	
nonprovisional	NO	\$1440	\$300	\$0	\$1740	09/30/2008	
EXAM	INER	ART UNIT	CLASS-SUBCLASS]			
LULIS, MI		2824	257-253000	•			
"Fee Address" indi PTO/SB/47; Rev 03-0 Number is required. 3. ASSIGNEE NAME A	ondence address (or Cha 1/122) attached. cation (or "Fee Address 2 or more recent) attach ND RESIDENCE DATA	inge of Correspondence "Indication form and. Use of a Customer A TO BE PRINTED ON	2. For printing on the p (1) the names of up to or agents OR, alternatic (2) the name of a single registered attorney or a 2 registered patent attor sited, no name will be to the property of the printing o	3 registered patent vely, e firm (having as a nagent) and the names rneys or agents. If no printed.	nember a 2 of up to name is 3	document has been filed for	
(A) NAME OF ASSIC	SNEE		(B) RESIDENCE: (CITY	and STATE OR CO	UNTRY)	oup entity Government	
4a. The following fee(s) a Issue Fee Publication Fee (N Advance Order - #	o small entity discount p		4b. Payment of Fee(s): (Ples A check is enclosed. Payment by credit car The Director is hereby overpayment, to Depo	d. Form PTO-2038 i	s attached.		
	SMALL ENTITY state	as. See 37 CFR 1.27.			ENTITY status. Sec 37 C		
NOTE: The Issue Fee and interest as shown by the r	I Publication Fee (if req ecords of the United Sta	uired) will not be accep ites Patent and Tradema	ted from anyone other than t rk Office.	he applicant; a regist	ered attorney or agent; or t	he assignee or other party in	
Authorized Signature				Date			
Typed or printed name				Registration No			
This collection of inform an application. Confident submitting the completed this form and/or suggesti Box 1450, Alexandria, V Alexandria, Virginia 223	ation is required by 37 C iality is governed by 35 application form to the ons for reducing this but irginia 22313-1450. DC 13-1450.	CFR 1.311. The informa U.S.C. 122 and 37 CF USPTO. Time will varden, should be sent to O NOT SEND FEES OF	tion is required to obtain or r R 1.14. This collection is est ry depending upon the indiv the Chief Information Office R COMPLETED FORMS To	etain a benefit by the imated to take 12 mi idual case. Any com er, U.S. Patent and Ti D THIS ADDRESS.	public which is to file (an nutes to complete, includi ments on the amount of ti rademark Office, U.S. Dep SEND TO: Commissioner	d by the USPTO to process) ng gathering, preparing, and me you require to complete sartment of Commerce, P.O. for Patents, P.O. Box 1450,	

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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/552,855	08/01/2006	Stephane Auvray	033339/300610	2527
826 75	590 06/30/2008		EXAM	UNER
ALSTON & BIRD LLP			LULIS, M	ICHAEL P
BANK OF AMERICA PLAZA			ART UNIT	PAPER NUMBER
101 SOUTH TRYON STREET, SUITE 4000 CHARLOTTE, NC 28280-4000			2824	

Determination of Patent Term Adjustment under 35 U.S.C. 154 (b)

(application filed on or after May 29, 2000)

The Patent Term Adjustment to date is 273 day(s). If the issue fee is paid on the date that is three months after the mailing date of this notice and the patent issues on the Tuesday before the date that is 28 weeks (six and a half months) after the mailing date of this notice, the Patent Term Adjustment will be 273 day(s).

If a Continued Prosecution Application (CPA) was filed in the above-identified application, the filing date that determines Patent Term Adjustment is the filing date of the most recent CPA.

Applicant will be able to obtain more detailed information by accessing the Patent Application Information Retrieval (PAIR) WEB site (http://pair.uspto.gov).

Any questions regarding the Patent Term Extension or Adjustment determination should be directed to the Office of Patent Legal Administration at (571)-272-7702. Questions relating to issue and publication fee payments should be directed to the Customer Service Center of the Office of Patent Publication at 1-(888)-786-0101 or (571)-272-4200.

Notice of Allowability

Application No.	Applicant(s)		
10/552,855	AUVRAY ET AL.		
Examiner	Art Unit		
MICHAEL LULIS	2824		

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address-All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS. This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

- 1. This communication is responsive to application filed 10/12/2005.
- The allowed claim(s) is/are 1-25.
- 3. Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 - a) All b) Some* c) None of the:
 - 1.

 Certified copies of the priority documents have been received.
 - 2. Certified copies of the priority documents have been received in Application No. _____
 - Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).
 - * Certified copies not received: _____.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.
THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.

- 4. A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
- 5. CORRECTED DRAWINGS (as "replacement sheets") must be submitted.
 - (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached
 - 1) Thereto or 2) to Paper No./Mail Date _____
 - (b) including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date _____.

Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).

 DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

Attachment(s)

- 1. Notice of References Cited (PTO-892)
- 2.
 Notice of Draftperson's Patent Drawing Review (PTO-948)
- Information Disclosure Statements (PTO/SB/08), Paper No./Mail Date 10/12/2005
- Examiner's Comment Regarding Requirement for Deposit of Biological Material
- 5. Notice of Informal Patent Application
- Interview Summary (PTO-413), Paper No./Mail Date
- 7. Examiner's Amendment/Comment
- Examiner's Statement of Reasons for Allowance
- Other <u>non-patent literature</u>.

/Richard Elms/ SPE AU 2824 6.23.08 Application/Control Number: 10/552,855

Art Unit: 2824

REASONS FOR ALLOWANCE

Claims 1-25 are allowed

The following is an examiner's statement of reasons for allowance: The prior art of record neither disclose nor render obvious claim 1 or claim 17:

 (Original) A method for modyfing at least an electronic property of a nanotube or nanowire comprising exposing said nanotube or nanowire to an acid having the formula

wherein R_1 , R_2 and R_3 are chosen in the group comprising (H, F, Cl, Br, I) with at least one of R_3 , R_2 and R_3 being different from H.

17. (Original) A P-type nanotube or nanowire having an absorbed substance that is an acid having the formula:

and wherein R_1 , R_2 and R_3 are chosen in the group comprising (H, F, Cl, Br, I) at least one of R_1 , R_2 and R_3 being different from H.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance"

Conclusion

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. The publication date of Auvray et al. (Appl. Phys. Lett. Vol. 85, No. 25, pp 5106-5108) disqualifies it as prior art.

Application/Control Number: 10/552,855

Art Unit: 2824

Any inquiry concerning this communication or earlier communications from the examiner should be directed to MICHAEL LULIS whose telephone number is (571)272-9015. The examiner can normally be reached on 10:00 AM to 6:30 PM Monday through Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Richard Elms can be reached on (571) 272-1869. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Michael Lulis/ Examiner, Art Unit 2824

/Richard Elms/ Supervisory Patent Examiner, Art Unit 2824 6.23.08 Art Unit: 2824